Report of the Laws and Regulations Committee

Dennis Johannes
Chairman
California Division of Measurement Standards

Reference
Key Number

200 Introduction

The Laws and Regulations Committee (Committee) addressed the following items at its 2003 Interim Meeting. Table A identifies agenda items by Reference Key Number, title, and page number. The first three digits of the Reference Key Numbers of the items are assigned from the subject series listed below. Voting items are indicated with a "V" after the item number. An "I" denotes issues reported for information. A "D" signifies issues that have been designated as developmental. Items marked with a "W" have been withdrawn.

This report contains recommendations to amend National Institute of Standards and Technology (NIST) Handbook 130, 2002 edition, "Uniform Laws and Regulations." Revisions proposed by the Committee are shown in **bold face print** by ~~crossing out~~ information to be deleted and underlining information to be added. New items proposed for the handbooks are designated as such and are shown in **bold face print**. "SI" means the International System of Units. "FPLA" means the Fair Packaging and Labeling Act. When used in this agenda, the term "weight" means "mass."

Subject Series

Handbook 130 – General	210 Series
Uniform Laws	220 Series
Weights and Measures Law (WML)	221 Series
Weighmaster Law (WL)	222 Series
Engine Fuels, Petroleum products, and Automotive Lubricants Inspection Law (EFL)	223 Series
Uniform Regulations	230 Series
Packaging and labeling Regulation (PLR)	231 Series
Method of sale of Commodities Regulation (MSCR)	232 Series
Unit Pricing Regulation (UPR)	233 Series
Voluntary Registration of Servicepersons and Service Agencies For Commercial Weighing and Measuring Devices Regulation (VREG)	234 Series
Open Dating Regulation (ODR)	235 Series
National Type Evaluation Regulation (NTER)	236 Series
Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation (EFR)	237 Series
Interpretations and Guidelines	238 Series
Price Verification	239 Series
NIST Handbook 133	250 Series
Other Items	260 Series

Table A
Index to Reference Key Items

Table B
Appendices

Details of All Items
(In Order by Reference Key Number)

232 Method of Sale of Commodities Regulation

232-1 V Stored Tare Weights

Source: Southern Weights and Measures Association (SWMA)

Background: Stored vehicle tare weights are often found to be incorrect. Errors found in vehicle tare weight surveys range from weighing 8900 pounds less than the stored tare to weighing 2680 pounds more than the stored tare. A load of sand or gravel at a cost of $5.50 per ton with a tare error of 750 pounds has a monetary value for each weighing error of $2.06. If this error occurs on four transactions per day for 240 working days, it results in an overcharge of more than $1,977 per year. Since the practice of using stored tare weights is followed by other types of businesses (e.g., landfills and asphalt plants) where prices may reach $70 or more per ton, an error of 750 pounds in the tare weight of a truck would equal $26 per weighment. If this truck were involved in four transactions per day for 240 working days, the overcharge would total more than $25,000 per year.

Recommendation: The Committee recognizes the need for a regulation requiring scale operators to maintain accurate "stored" tare weights. In 2002 the Committee reviewed the information concerning this issue and voted to submit the item for a vote, using the language as proposed by the SWMA. In July 2002, the Committee recommended that NIST Handbook 130, Method of Sale Regulation, Section 3, General be amended by adding Section 3.5 - Vehicle Tare Weights. This item was not adopted at the 2002 NCWM. In January 2003, the Committee recommended that NIST Handbook 130, Method of Sale Regulation, Section 3, General be amended using alternative language as provided by the Northeastern Weights and Measures Association (NEWMA). The proposed language is as follows:

> **3.5 – Vehicle Tare Weights - Whenever stored vehicle tare weights are employed, the following conditions and requirements shall apply:**
>
> **3.5.1 - All stored vehicle scale tare weights shall be determined to the nearest scale division. When stored tare weights are used, issued weight certificates shall identify that fact by placing words such as "stored tare" next to the tare weight. Abbreviations or symbols may be used, provided the terminology is defined elsewhere on the printed ticket.**
>
> **3.5.2 - Stored vehicle scale tare weights shall be verified at regular intervals at a frequency to be determined by the jurisdiction with statutory authority for the device, unless preempted by a more stringent guideline/requirement or modification of the vehicle.**

237 Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation

237-1 I Petroleum Subcommittee Agenda Items

Source: Petroleum Subcommittee

Background: The Committee developed an agenda for the Subcommittee based on the comments received on the following projects:

Federal Kerosene Dye Information – It was suggested that information on the new Internal Revenue Service kerosene dye policies be distributed to the States. The Subcommittee will distribute this information.

NCWM Publication 21- The Western Weights and Measures Association recommends that the Petroleum Subcommittee revise the sampling procedures and container requirements in NCWM Publication 21--*Petroleum Products Sampling Procedures and Safety Manual* to include precautions regarding the use of clear glass containers for product samples. This recommendation is based on data presented to the NCWM by Chevron Products Company and Tennessee.

Update the Engine Fuels, Petroleum Products, and Lubricants Laboratory Guideline – This guideline is contained in the Interpretations and Guidelines Section of NIST Handbook 130 and was last updated in 1994. Since that time, the cost of equipment has changed and new test methods have been developed. The Subcommittee proposes to revise and update the guideline.

Automotive Lubricants – The Engine Fuels, Petroleum Products, and Lubricants Laboratory Guideline (EFR) implies that the document covers lubricants. When the regulation was developed, the Subcommittee gave developing engine fuel requirements priority. The Subcommittee has proposed requirements for lubricants.

Comments: Ron Hayes, Missouri, updated the Committee on the Petroleum Subcommittee items. He reported that the "Federal Kerosene Dye Information" would be addressed in a new section to be added to a future version of ASTM D 3699 Standard Specification for Kerosene. Automotive Lubricants and NCWM Publication 21 have been addressed as separate issues (see L&R items 237-2 and 237-3). The Committee has concerns as to the effectiveness of the EFR since it is impossible to keep the document up to date. The Committee is considering two possibilities: 1) if the guideline is to be maintained, it will need to be revised to include additional equipment for testing premium diesel, and the equipment costs must be updated; and 2) remove the guideline from NIST Handbook 130 and post it on the internet where it can be updated on a more frequent basis. The Committee solicits comments concerning the proposed options.

237-2 I Uniform Engine Fuels, Petroleum Products, and Lubricants Regulation

Source: Western Weights and Measures Association (WWMA)

Background: WWMA received numerous recommendations stating the need to update the EFR. EFR has not been updated since 1994. This recommendation is based on data presented to the WWMA by the Chevron Texaco Corporation.

Comments: At the WWMA meeting, David Heck, Chevron Texaco Corporation, commented that API supports the latest changes to EFR. The WWMA recommends that the latest amended version, which includes requirements for lubricants and which is contained in Appendix A, move forward as a voting item.

Mike Belue, Belue Associates, reported that the State of California and Chevron Texaco have worked together to include the latest specifications and definitions to the document. Randy Jennings, Tennessee, reported that California (Dave Lazier and Dennis Johannes) and the Subcommittee members from Chevron Texaco have taken the lead on this issue. The SWMA supports the draft and recommends consideration by the Committee.

Recommendation: The changes proposed by WWMA to the EFR were published in Appendix A of the Committee's 2002 Report. The Committee recommends that the proposed changes be studied at the regional weights and measures meetings and comments be submitted at the 2004 Interim Meeting.

237-3 V Petroleum Products Sampling Procedures and Safety Manual

Source: Western Weights and Measures Association (WWMA)

Background: WWMA recommends the revision of sampling procedures and container requirements in NCWM Publication 21, "Petroleum Products Sampling Procedures and Safety Manual," to include adequate precautions regarding the use of clear glass containers for product samples. This recommendation is based on data presented to the WWMA by the Chevron Texaco Corporation and Tennessee.

Recommendation: Three of the four regional W&M Associations recommended similar changes to NCWM Publication 21. The Committee studied the proposed changes and voted to move the item forward using the changes proposed by the SWMA. The SWMA recommended that the following text replace Publication 21, Section IV, paragraph B.

B. Types of Sample Containers

Sample containers may be clear or brown glass bottles or metal cans. A clear bottle is advantageous when conducting a visual examination for cleanliness, free water or solid impurities, while brown glass bottles provide protection from light. The samples to be tested for octane or cetane should be protected from light because the light can alter the characteristics of the samples. (See ASTM Research Report RR: D02-1502 for documented effects). Plastic-coated bottles are available which provide protection from shattering. The only suitable metal containers are seamless aluminum bottles or metal cans with seams soldered on the exterior surface with a flux of rosin in a suitable solvent, which is easily removed with gasoline.

Text to be replaced

B. Types of Sample Containers

Sample containers may be clear or brown glass bottles, aluminum bottles, or metal cans. The clear bottle is advantageous because it may be examined visually for cleanliness, and also allows visual inspection of the sample for free water or solid impurities. The brown glass bottle affords some protection from light. Plastic coated bottles are available which provide protection against shattering. The only suitable metal cans are those with the seams soldered on the exterior surface with a flux of rosin in a suitable solvent that is easily removed with gasoline or seamless aluminum bottles. NFPA 30A 9.2 (1994 edition) states "No delivery of any Class I or Class II liquid shall be made into portable containers unless the container is constructed of metal or is approved by the authority having jurisdiction, has a tight closure, and is fitted with a spout or is so designed that the contents can be poured without spilling." If a jurisdiction is operating in an area where NFPA requirements are adopted, this should be considered in selecting sample containers that will be used at retail locations. Screw caps made of either plastic or metal may be used; the caps should provide a vapor tight closure seal. The screw caps must be protected with liners made of metal foil, teflon, polyethylene, or other material that will not be destroyed by or affect the sample product. Sample containers can be cleaned and used repeatedly as long as they are still serviceable. The caps should be used once and then disposed of, this will help prevent leakage and loss of reliability of the sample.

237-4 I Biodiesel Fuel

Source: Central Weights and Measures Association (CWMA)

Recommendation: Amend EFR Section 1. Definitions, Section 2. Standard Fuel Specifications, and Section 3. Classification and Method of Sale of Petroleum Products as follows:

Section 1. Definitions
~~1.8. Biodiesel. – means a blend consisting of diesel fuel and a substantial amount of esterfied animal fats and/or vegetable oil(s).~~

Replace with new definitions:

1.8. Biodiesel – means a fuel comprised of mono-alkyl esters of long chain fatty acids derived from vegetable oils or animal fats, designated B100 *(source: Standard ASTM D 6751).*

Comments: Steve Howell, MARC-IV, representing the biodiesel industry testified at the Interim Meeting on each of the three proposed sectional changes. Mr. Howell is the technical director of the National Biodiesel Board (NBB) and serves as chairman of the ASTM Biodiesel Task Force.

The biodiesel industry supports the proposed new definition that is the equivalent to ASTM's definition and also recommends adding an additional definition for biodiesel blends. "Biodiesel blends" are blends of biodiesel and diesel fuel. Mr. Howell stated that the current definition contained in NIST Handbook 130 for biodiesel is incorrect and should be changed. ASTM, along with the biodiesel industry, has worked to define what biodiesel is and is not. ASTM standards also define the difference between pure biodiesel, or B100, and blends of biodiesel with petroleum diesel. The ASTM specification for biodiesel has been developed to insure satisfactory engine operation with B20 (20 percent biodiesel) blends and blends less than 20 percent biodiesel. Adopting the definitions that ASTM has developed for biodiesel will eliminate confusion between industry standard biodiesel and other materials that have been inappropriately called biodiesel (i.e., coal slurries, raw vegetable oils, partially reacted oils, etc.) that can cause serious engine problems. It will also assist in minimizing confusion on the type of product a consumer purchases, such as biodiesel B100 or a blend of biodiesel with petroleum diesel.

The Committee recommends:

1. Adopt the ASTM definition for Biodiesel B100 as proposed.

    1.8.1 Biodiesel Blend. – A fuel comprised of a blend of biodiesel fuel with petroleum-based diesel fuel, esignated BXX.

    1.8.2 In the abbreviation, BXX, the XX represents the volume percentage of biodiesel fuel in the blend.

2. Adopt a definition for a Biodiesel Blend, as outlined in ASTM D 6751 below:

    Section 2. Standard Fuel Specifications

    2.13.1 B100 biodiesel shall meet the most recent version of ASTM D 6751, Standard Specification for Biodiesel Fuel (B100) Blend Stock for Distillate Fuels

    2.13.2 Biodiesel and diesel blends shall meet the following requirements: the base diesel fuel shall meet the requirements of ASTM 975, and the biodiesel blend stock shall meet ASTM D 6751.

    2.13.3 Exception - biodiesel may be blended with diesel fuel whose sulfur or aromatic levels are outside Specification D 975 Grades 1-D, 2-D, and low sulfur 1-D and 2-D, provided the finished mixture meets pertinent national and local specifications and requirements for these properties.

Comments: There is no specification for biodiesel contained in Section 2, of NIST Handbook 130 as there are for other fuels. The proposed change would adopt the current language contained in ASTM specification D 6751. The proposed amendment would help ensure that the customer receives fuel that meets ASTM specifications.

The ASTM specification for diesel fuel D 975, containing biodiesel in blends of B20 or below, is likely to change very soon. This new group of fuels is being termed a "fill and go" category of D 975. Separate "fill and go" specifications are also being considered for other fuels such as water-emulsified and ethanol-emulsified diesel. The anticipated change is to place specifications on fuels, which require no engine modifications but are different than conventional petroleum-based diesel fuels that include different parameters than those currently contained in D 975.

The D 975 "fill and go" specification may also impact biodiesel specification D 6751 as it relates to the properties that either parent fuel must meet prior to blending biodiesel B20 and below. If ASTM adopts new specifications, it is hoped that the NCWM would consider similar adoption.

Assuming that the Conference will adopt ASTM changes or modifications to D 975 or D 6751, adopting the language in the current ASTM specification seems to be a prudent course of action.

Recommendation: Adopt the specification language as proposed.

Section 3. Classification and Method of Sale of Petroleum Products

3.13 Biodiesel

3.13.1 How to Identify Biodiesel. – Biodiesel shall be identified by the capital letter B followed by the numerical value volume percentage. (Example: B20)

3.13.2 Retail Dispenser Labeling. – Each retail dispenser of biodiesel shall be labeled with the capital letter B followed by the numerical value volume percent biodiesel and ending with the word 'biodiesel." (Example: B20 biodiesel)

3.13.3 Exemption. – Diesel fuel containing two percent or less biodiesel is exempted from requirements 3.13.1 and 3.13.2."

Discussion: Laws and regulations require that accurate and adequate information be placed on commodities allowing consumers to make price and quantity comparisons. For our economy to function properly consumers must also be able to rely on manufacturers product "claims". Products must meet manufacturer specifications and claims.

When ASTM first developed the biodiesel specification in 1993, it proposed a specification for biodiesel use as a pure fuel, called B100. Through the ballot process, several engine companies expressed reservations that they had no experience with using biodiesel in blends over 20 percent with diesel fuel (B20). B20 has now been used successfully in over 40 million on-road miles over the last 10 years with no changes to the fuel systems on conventional diesel engines. With the higher cost of biodiesel, very few customers used blends higher than B20, and neither the biodiesel industry nor the engine industry was interested in investing the money and resources needed to meet a B100 standard.

Since B20 was the highest level product envisioned with commercial potential, and since the engine community would not support inclusion higher than 20 percent without further testing, the ASTM standard was changed from an independent B100 standard to a blend stock standard. The ASTM Biodiesel Task Force developed D 6751 as the set of properties that B100 must meet before being blended into diesel fuel up to 20 percent biodiesel by volume. For blends higher than B20, the user should consult with their engine company prior to use. The major questions with blends over B20 are related to costs, rubber and gasket compatibility with high blend of biodiesel and cold flow properties of high blends.

As a blend-stock standard, the ASTM Biodiesel Standard was developed in a manner similar to that of 1-D and 2-D diesel fuel, which are also frequently blended in the commercial marketplace as a means to improve the cold flow properties of 2-D in winter months. If the parent fuels meet their respective specifications, they can be blended and there is no separate set of specifications for the blended mixture. The current requirement of the biodiesel specification is as follows: if biodiesel meets D 6751 and diesel meets D 975 (either 1-D or 2-D), then the two can be blended up to 20 percent biodiesel and there is no separate set of properties required for the B20 mixture. For example, as with 2-D, blends of B20 can contain higher levels of 1-D for improved cold flow properties in winter. This method has served industry and consumers well, especially in the formative stages of biodiesel development.

There are two issues that come up from time to time. The first issue is that since biodiesel costs more than conventional diesel, there is the possibility that fuel distributors will advertise that they are putting in more biodiesel than they are delivering and, thus, derive undue profits. If a distributor claims that they are selling B20 or B2 and they are putting in less than one half of one percent, the distributor is misrepresenting the product. The biodiesel industry claims this is not a pump labeling issue but an enforcement issue.

The second issue is the claim that biodiesel is being blended with diesel fuel when products such as raw vegetable oil or other oils, which do not meet D 6751, are blended with diesel fuel. The biodiesel industry claims this is an enforcement issue. The National Biodiesel Board has established a quality control program (BQ-9000) that oversees producers and suppliers of biodiesel. Use of BQ-9000-certified suppliers is an effective means to mitigate this potential issue, as is requiring that the distributor provide proof of EPA biodiesel registration. To obtain an EPA registration for biodiesel the

supplier must commit to meeting D 6751. Again, aggressive competition, as well as the educational and promotional activities by the industry, have mitigated the requirement that biodiesel must meet D 6751. NCWM adoption of the D 6751 language will help in those efforts.

While B20 and lower levels of biodiesel fuel are considered "fill and go" and require no changes to the engine or fuel system, levels of biodiesel higher than B20 may need to have different gaskets and hoses. While blending biodiesel greater than 20 percent does not readily occur in today's market place, it may in the not too distant future. Therefore, the biodiesel industry supports accurate labeling for all fuel dispensers and encourages the NCWM to adopt these recommendations.

As the price of biodiesel moves closer to the price of diesel fuel and biodiesel ceases to be a niche product blended into diesel for the Energy Policy Act of 1992 (EPAct) compliance (cleaner air and superior lubricity and cetane), it becomes just one of the myriad compounds which could make up conventional diesel fuel. Refiners could blend in biodiesel to reduce the sulfur content or aromatic content of the finished blend. They could use it to replace their existing lubricity additives. If the price of biodiesel was more equal to diesel, they may add 1 percent today, 5 percent the next day, and 20 percent the next day. As long as the finished blend meets the D 975 "Fill and Go" specification, the level of biodiesel could range as high as 20 percent.

The proposed pump labeling requirement (requiring that pumps containing over 2 percent biodiesel be labeled with the blend percentage) would essentially eliminate that flexibility and could significantly reduce the amount of biodiesel that is eventually used and consumed. ASTM is currently developing a Biodiesel "Fill and Go" specification for D 975 that is not based on the parent fuels, but on the finished fuel and what is satisfactory for operation in a diesel engine. This may also mean changes to D 6751, which is a stand-alone specification. The current thinking is that the upper biodiesel concentration limit for the D 975 "Fill and Go" specification will be 20 percent although it is possible that it could be higher or lower. Whatever the concentration of biodiesel, if the finished blend meets the D 975 "Fill and Go" specification, the fuel is D 975-grade diesel fuel and would have to be labeled such. According to industry, existing labeling contained in NIST Handbook 130 is sufficient.

If the NCWM adopts the future D 975 "Fill and Go" specification and any changes required for D 6751, then it appears prudent to place the pump labeling exemption at 20 percent biodiesel at the present time, with the understanding that it might be higher or lower in the future based on the outcome of the ASTM "Fill and Go" recommendations.

Ron Hayes, State of Missouri, recommended adding a section requiring fuel suppliers to disclose the biodiesel content on delivery tickets or bills of lading, if the biodiesel content exceeds the appropriate level for dispenser labeling requirements.

Recommendation: The Committee recommends this item be maintained informational to allow for comments from all interested parties.

1.8.1 How to Identify Biodiesel and Biodiesel Blends. – Biodiesel and biodiesel blends shall be identified by the capital letter B followed by the numerical value volume percentage. (Examples: B20, B100)

1.8.2 Retail Dispenser Labeling. – Each retail dispenser of biodiesel or biodiesel blends shall be labeled with the capital letter B followed by the numerical value volume percent biodiesel and ending with the words "biodiesel blend." (Example: B20 biodiesel blend)

1.8.3 Exemption. – Diesel fuel containing *"two"? or "twenty"? (select one for final proposal)* percent or less biodiesel is exempted from requirements 3.13.1 and 3.13.2.

1.8.4 Documentation for Dispenser Labeling Purposes. – When the biodiesel blend exceeds *"two"? or "twenty"? (select one for final proposal)* percent biodiesel, the retailer shall be provided, at the time of delivery of the fuel, a declaration of the volume percent biodiesel on an invoice, bill of lading, shipping paper, or other documentation,. This documentation is only for dispenser labeling purposes; it is the responsibility of any potential blender to determine the amount of biodiesel in the diesel fuel prior to blending.

237-5 D E diesel

Source: Central Weights and Measures Association (CWMA)

Recommendation: To request that E diesel be added to the agenda of the Committee as a "Developing Item".

Justification:

(a) There is currently no consensus specification for E diesel, and a specification may need to be developed at a later date.
(b) It may become necessary to develop "retail" labeling guidelines for E diesel.
(c) If development of specification and labeling guidelines need to be developed, it may become necessary to assign this effort to the Petroleum Subcommittee or a specially selected Task Group.

Background: E diesel is a blend of Standard Number 2 diesel fuel containing up to 15 percent ethanol by volume. The blend also contains 0.2 to 5.0 percent by volume proprietary additives to maintain certain fuel properties and blend stability. Currently E diesel does not have to conform to any specification designating properties.

E diesel is being sold commercially for off-road applications and is being used in several on-road demonstration fleets. A group of E diesel stakeholders have formed the E diesel consortium to address the technical and regulatory issues with this fuel.

The Consortium has also approached ASTM about developing an E diesel specification.

At the CWMA Interim Meeting in September 2002, E diesel Consortium representative Robert Reynolds provided an update on the activities of the E diesel Consortium and requested that E diesel be put on the Committee agenda as a "Developing Item."

237-6 V Nozzle Requirements for Diesel Fuel

Source: Central Weights and Measures Association (CWMA)

Background: Consumers are dispensing diesel fuel into non-diesel vehicles despite the proper labeling of retail motor fuel dispensers. The Committee feels that the following recommendation will help eliminate the problem.

Recommendation: Amend NIST Handbook 130, Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation, Section 3. Diesel Fuel, as follows:

3.3 Diesel Fuel

3.3.X. Nozzle Requirements for Diesel Fuel. -- Each dispensing device from which diesel fuel is sold shall be equipped with a nozzle spout having a terminal end with an outside diameter of not less than 23.63 mm (0.930 in).

237-7 V Premium Diesel, Single Definition

Source: Southern Weights and Measures Association (SWMA)

Background: SWMA proposed a change to the EFR by deleting the energy content and fuel injector cleanliness requirement.

Justification for changes:

A single definition for premium diesel is imperative for this rule to gain acceptance by states. NCWM passed this definition under the assurance that the Working Group (WG) would continue to monitor and work toward a better solution. The SWMA believes that action must be taken based on ASTM activities, recently reviewed survey data, and work group discussions that have included engine manufacturing representatives.

Thermal Stability – Engine manufacturers have expressed that a standard of 80 percent should provide an adequate fuel. There was no recommended change to this value from the premium diesel work group. Data reviewed indicates this value should be achievable in most cases.

Energy Content – Fungible issues continue to exist. Engine manufacturer representatives have indicated that removing the requirement would be satisfactory.

Fuel Injector Cleanliness, along with the cafeteria approach, has been a very controversial component of this definition. The working group commitment to monitor the progress of L 10 as an ASTM test method is to report officially to the NCWM that the ASTM effort to pass this method has failed and the ASTM L 10 Surveillance Panel has dissolved. Even without the cost factor, the test can no longer be run. If a laboratory were to offer the test and a failure was cited, it is likely that the cited party would be able to successfully contest the results from a test. Unfortunately, the detergency criteria, which may well provide a benefit to the end user, can no longer be used.

Recommendation: Amend NIST Handbook 130, Uniform Engine Fuels, Petroleum Products, and Automotive Lubricants Regulation, Section 2 Standard Fuel Specifications, Subsection 2.2.1. Premium Diesel Fuel, as follows:

Add to Definitions:

1.XX Lubricity. – a qualitative term describing the ability of a fluid to affect friction between, and wear to, surfaces in relative motion under load.

Delete from the current Definitions:

~~**1.17. Energy Content. m**eans the gross energy content of the heating value of diesel fuel as defined by its heat of combustion; the heat released when a known quantity of fuel is burned completely under specific conditions as determined by ASTM Standard Test Method D240.~~

~~**1.21. Fuel Injector Cleanliness.** means a characteristic of the fuel which allows engine operation without fuel contribution to excessive injector deposits. (Added 1998)(Amended 1999)~~

Amend the following:

2.21. Premium Diesel Fuel – ~~Effective January 1, 2000, a~~ All products identified on retail dispensers, bills of lading, invoices, shipping papers, or other documentation with terms such as premium, super, supreme, plus or premier must conform to ~~at least two of~~ the following requirements:

~~**(a) Energy Content** – A minimum energy content of 38.65 MJ/L, gross (138,700 BTU/gallon, gross) as measured by ASTM Standard Test Method D 240.~~

~~(b)~~ **(a.) Cetane Number -** A minimum cetane number of 47.0 as determined by ASTM Standard Test Method D 613.

~~(c)~~ (**b.) Low Temperature Operability -** A cold flow performance measurement which meets the ASTM D 975 tenth percentile minimum ambient air temperature charts and maps by either ASTM Standard Test Method D 2500 (Cloud Point) or ASTM Standard Test Method D 4539 (Low Temperature Flow Test, LTFT). Low temperature operability is only applicable October 1 - March 31 of each year.

~~(d)~~ **(c.) Thermal Stability -** A minimum reflectance measurement of 80 percent **as determined by ASTM Standard Test Method D 6468** ~~using a green filter in the Octel America's Test Method No. F21-61~~ (180 min, 150 °C).

(d.) Lubricity – A minimum load of 3100 grams as determined by ASTM D 6078, If an enforcement jurisdiction's single test of less than 2600 grams is determined, a second test shall be conducted. If the average of the two tests are less than 2600 grams, the sample does not conform to the requirements of this part.

~~**(e) Fuel Injector Cleanliness** – A Coordinating Research Council (CRC) rating of 10.0 or less and a flow loss of 6.0 percent or less as determined by the Cummins L-10 Injector Depositing Test.~~

~~1. When a fuel uses a detergent additive to meet the requirement, upon the request of the Director, the fuel marketer shall provide test data indicating the additive being used has passed the Cummins L-10 Injector Depositing Test requirements when combined with Caterpillar 1-K (CAT 1-K) reference fuel. The Director may also request records or otherwise audit the amount of additive being used to ensure proper treatment of fuels according to the additive manufacturer's recommended treat rates.~~

~~1.1. Upon the request of the Director, the fuel marketer shall provide an official "Certificate of Analysis" of the physical properties of the additive.~~

~~1.2. Upon the request of the Director, the fuel supplier shall provide a sample of detergent additive in an amount sufficient to be tested with CAT 1-K reference fuel in a Cummins L-10 Injector Depositing Test. The regulatory agency requesting the sample shall be responsible for all costs of testing.~~

~~2. When a fuel marketer relies on the inherent cleanliness of the diesel fuel to pass the Cummins L-10 Injector Depositing Test or if the fuel requires a lower detergent additive level than the amount required when the additive is used with the CAT 1-K reference fuel, the fuel marketer shall provide, upon the request of the Director, annual test results from an independent laboratory that confirms the fuel meets the requirements of 2.2.1. (e). The time of fuel sampling and testing shall be at the Directors discretion. The Director may witness the sampling of the fuel and the sealing of the sample container(s) with security seals. The Director may request confirmation from the testing laboratory that the seals were intact upon receipt by the laboratory. The final test results shall be provided to the Director. All costs for sampling, transporting, and testing shall be the responsibility of the fuel supplier. If the annual test complies, any additional testing at the request of the Director shall be paid for by the regulatory agency.~~
~~(Added 1998) (Amended 1999)~~

~~**3.3.3. Labeling Properties of Premium Diesel** – All retail dispensers identified, as premium diesel must display either:~~

~~1. A label that includes all qualifying parameters as specified in 2.2.1. Premium Diesel Fuel affixed to each retail dispenser. The label shall include a series of check blocks clearly associated with each parameter. The boxes for the parameters qualifying the fuel must be checked. All other boxes shall remain unchecked. The marketer may check as many blocks as apply, or,~~

~~2. A label that includes only the parameters selected by a marketer to meet the premium diesel requirements as specified in 2.2.1. Premium Diesel Fuel. In either case, the label must display the following words:~~

~~"Premium Diesel Fuel" in a type at least 12 millimeters (2 inches) in height by 1.4 millimeters (1/16 inch) stroke (width of type.)~~

~~When applicable, as determined by the label option and qualifying parameters chosen by the marketer, the label must also display the following information and letter type size:~~

~~The words "Energy Content," "Cetane Number," "Low Temperature Operability," "Thermal Stability," and "Fuel Injector Cleanliness" in a type at least 6 millimeters (1/4 inch) in height by 0.75 millimeter (1/32 inch) stroke (width of type.)~~

~~A declaration of the minimum Energy Content (minimum 38.65 MJ/ L gross [138,700 BTU/gallon]), if energy content is chosen as a qualifying parameter, in type at least 3 millimeters (1/8 inch) in height by 0.4 millimeter (1/64 inch) stroke (width of type.)~~

~~The minimum cetane number guaranteed (at least 47.0) if cetane number is chosen as a qualifying parameter, in a type at least 3 millimeters (1/8 inch) in height by 0.4 millimeter (1/64 inch) stroke (width of type.)~~

~~The date range of low temperature operability enhancement, (e.g., October – March,) along with the qualifying test method (ASTM D 4539 or ASTM D 2500), if low temperature operability is chosen as a qualifying parameter, in a type at least 3 millimeters (1/8 inch) in height by 0.4 millimeter (1/64 inch) stroke (width of type).~~

~~For Example:~~

~~**Premium Diesel Fuel**~~

~~High Energy Content~~
~~Cetane Number, 47.0 min~~
~~Low Temperature Operability (Oct.-Mar.,LTFT)~~
~~Thermal Stability~~
~~Fuel Injector Cleanliness~~

~~or~~

~~**Premium Diesel Fuel**~~

~~Cetane Number, 47.0 min~~
~~Low Temperature Operability (Oct. Mar., LTFT)~~
~~Thermal Stability~~

~~The label must be conspicuously displayed on the upper half of the product dispenser front panel in a position that is clear and conspicuous from the driver's position.~~
~~(Added 1998) (Amended 1999)~~

7.1.1. Premium Diesel -The following test methods shall be used to determine compliance with the ~~applicable~~ premium diesel parameters:

~~(a) Energy Content – ASTM D 240~~

~~(b)~~ **(a.)**Cetane Number - ASTM D 613

~~(c)~~ **(b.)** Low Temperature Operability - ASTM D 4539 or ASTM D 2500 (according to marketing claim)

~~(d)~~ **(c.)** Thermal Stability - ~~Octel America F21-61 (180 min, 150 EC)~~ ASTM D 6468 (180 min., 150°C).

(d) Lubricity – ASTM D 6078

~~(e) *Fuel Injector Cleanliness – The most recent edition of the Cummins L-10 Injector Depositing Test as endorsed by the ASTM L-10 Injector Depositing Test Surveillance Panel.~~

~~* Upon ASTM approval of a standard test methods that are is derived from the above referenced methods, the ASTM standard test methods shall be used to determine compliance with the applicable premium diesel parameter.~~
(Amended 1999, 2003)

239 Price Verification

239-1 I Amend NIST Handbook 130, Examination Procedure for Price Verification Section 6.2

Source: Western Weights and Measures Association (WWMA)

Background: While the definition of a point-of-sale system includes a requirement for a weighing and measuring device and requires indications to be visible in a direct sale (NIST Handbook 44, G-UR.3.3.), cash registers and computer monitors that do not incorporate a weighing or measuring device are not subject to the requirement that the indication be visible to a consumer. The WWMA recommends that the practice of consumers having access to price information as the transaction is in progress be standardized. Consumers would then be able to instantly confirm prices, businesses could correct incorrect prices during the transaction, and the benefit of correct prices and time saved would help everyone involved. Many businesses that use cash registers or computer monitors currently have remote indicators that meet the requirements, and for the ones that do not, technology and equipment is available to provide such indications at an affordable price.

Proposal: Modify NIST Handbook 130, Examination Procedure for Price Verification, Section 6, Inspection 6.2 Other as follows:

> Add:
> **(a) <u>A cash register or computer monitor used to list and total customer purchases must be positioned so that its indications may be observed from a reasonable customer location and/or have a remote indicator display so that its indications may be observed from a reasonable customer location.</u>**

Committee Recommendation: The Committee feels that while this item is worthy of consideration it should not be placed in the Examination Procedure for Price Verification contained in NIST Handbook 130. The Committee believes that a more appropriate location for the proposal would be in NIST Handbook 130, Weights and Measures Law, Section 22, Prohibited Acts.

Comments: The SWMA considered this to be a problem, but there is concern whether or not this is a weights and measures issue. Additionally, there are concerns that Publication 19, which is now out of print and obsolete, is the appropriate place to add this requirement if it is considered a weights and measures issue. The scope of this requirement is very broad and would impact a wide range of retail establishments, which may not come under the jurisdiction of weights and measures authorities since the systems may not be attached to a scale or a meter.

250 NIST Handbook 133, Checking the Net Content of Packaged Goods

250-1 W Amend NIST Handbook 133, 4th Edition, Chapter 2, Section 2.3

Source: Western Weights and Measures Association (WWMA)

Background: NIST Handbook 133, 4th Edition, Chapter 2, Section 2.2 states that a scale/balance having a "scale division no larger than 1/6 of the Maximum Allowable Variation (MAV) for the package size being weighed" is required to test product. The example used to illustrate this concept on page 7 of H-133 uses a 0.002-lb scale division as the largest unit of measure appropriate for weighing these packages. The existing examples on pages 11, 12 and 16 are not consistent with the requirements of Section 2.2 and should be modified. In addition to the device suitability requirement, the reason for recording package errors in terms of "units of measure/dimensionless units" is to simplify and reduce computation errors. WWMA believes that the examples on pages 11, 12 and 16 are unnecessarily restrictive in that they require the use of the smallest scale division without any consideration to the weight of the package, the size of the errors, or the graduations of the scale being used. For example, in a recent series of inspections, shortages as large as 12 pounds were found for 60-lb bags of concrete mix. The scale used to conduct the inspection had a minimum division of 0.002 lb,

which would require the package errors to be recorded in a unit of measure of 0.001 lb. The recorded errors (in dimensionless units) for these inspections were as large as 12 000. Use of a larger unit of measure that met the MAV/6 requirement (MAV = 2 % of labeled quantity or 1.2 lb; MAV/6 = 0.2 lb) would not have affected the results of the inspection.

Recommendation: Amend NIST Handbook 133, pages 11 and 12, the second and third "Example" contained in the question "How are the specific steps of the Basic Test Procedure and document the inspection identified?" and amend the "Example" on page 16 contained in the question "How are individual package errors determined for the tare sample packages?" as follows:

Pages 11 and 12

Example: If the net weight declared on a package is 1 lb, the metric equivalent (accurate to six significant digits) is 453.592 g. Do not round down or truncate values in the calculations until the nominal gross weight is determined and recorded. If the package is also labeled 454 g. then the metric declaration is larger than the inch-pound declaration and should be used to verify the net contents of the package. The Basic Test Procedure does not prohibit the use of units of weight instead of dimensionless units when recording package errors, nor does it prohibit the use of net content computer programs to determine product compliance. Record the unit of measure in box 2. The unit of measure ~~is the minimum division of the unit of measurement used to conduct the test. If a scale is used that reads to thousandths of a pound, the unit of measure is 0.001 lb even if the scale division is 0.002 lb or 0.005 lb,~~ should be less than or equal to MAV/6.

Example: ~~If the scale has a scale division of 0.5 g, the unit of measure is 0.1 g. If a weighed package that has an error of " 0.5 g," record the error as " 5" using the dimensionless units." If the scale indicates in increments of 0.002 lb, the unit of measure is 0.001 lb. If a weighed package has an error of "0.016," record the error as "16" using "dimensionless units."~~ **The MAV for packages labeled 2.50 lb is 0.086 lb (see Table 2-5). The MAV/6 is 0.014 lb. If using a scale that reads in hundredths of a pound, the largest appropriate unit of measure should be 0.01 lb. If the scale division is in thousandths of a pound, the unit of measure may be 0.001, 0.002, or 0.005 lb.** When using dimensionless units, multiply package errors by the unit of measure to obtain the package error in weight.

Page 16

Example: ~~If weighing in 0.001 increments, the unit of measure is also 0.001 lb~~. **If the unit of measure is 0.001 lb *and*** ~~If~~ the package error for the first package opened for tare is +0.008 lb, instead of recording 0.008 lb in the plus column, record the error as "8" in the plus column. If the second package error is +0.060 lb, record the package error as "60" in the plus column, and so on. (This section does not prohibit the use of units of weight instead of dimensionless units or computer programs.)

Comments: Although there may be some benefits to clarifying the language of Handbook 133, the Southern Weights and Measures Association (SWMA) is not convinced that the proposed language is needed or justified to reverse the handbook at this time. The Committee agreed with the interpretation and recommendation of the SWMA and voted to withdraw this item.

250-2 W Amend NIST Handbook 133, 4th Edition, Chapter2, Section 2.2

Source: Western Weights and Measures Association (WWMA)

Background: The WWMA reported that the test procedures in NIST Handbook 44 are designed for commercial weighing and measuring devices. A scale, when used by an official to inspect/test the net content of packaged goods, is in effect a comparator with mass standards. As currently written in NIST Handbook 133, the scale test requirements and the frequency that they are tested are unnecessarily time-consuming and onerous on the regulatory official. This proposal simplifies the verification procedure and allows the official some flexibility. The requirement to hold the scale to tolerances to one-half scale divisions is difficult to determine under field conditions. The proposal to hold tolerances to whole divisions is reasonable bearing in mind that mass standards will determine any error that could then be corrected during the weighing operation.

Recommendation: Amend the scale test in NIST Handbook 133, 4th Edition, Chapter 2, Section 2.2, Measurement Standards and Test Equipment, as follows:

How often should I verify the accuracy of a scale?

Verify the accuracy of a scale before each initial daily use, each use at a new location, or when there is any indication of abnormal equipment performance (e.g., erratic indications). ~~Recheck the scale accuracy if it is found that the lot does not pass, so there can be confidence that the test equipment is not at fault.~~

Which accuracy requirements apply?

Scales used to check packages must meet the ~~acceptance~~ tolerances ~~specified~~ for their **test load and** accuracy class **specified** in **Table 1-2** ~~the current edition of NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Weighing and Measuring Devices" (NIST HB 44). The tolerances for Class II and Class III digital scales are presented in Section 2.20. Scales, in NIST HB 44.~~

In testing, which tolerances apply to the scale?

Table 1-2 ~~Acceptance~~ Tolerances for Class of Scales based on Test Load in Divisions		
Test Load in Divisions		
Class II Scale	Class III Scale	Tolerance
0 to 5 000	0 to 500	Plus or Minus **1** ~~**0.5**~~ Division
5 001 to 20 000	501 to 2 000	Plus or Minus 1 Division
20 001 or more	2 001 to 4 000	Plus or Minus **2** ~~**1.5**~~ Divisions
Not Applicable	4 001 or more	Plus or Minus **3** ~~**2.5**~~ Divisions

Do not use a scale if it has an error that exceeds the **Table 1-2** ~~**specified**~~ tolerance in any of the performance tests described in the following section.

Which performance tests should be conducted to ensure the accuracy of a scale?

Use the following procedures **and certified mass standards** to verify the scale. The**se** following procedures, **are** based on those required in NIST Handbook 44 **and** have been modified to reduce the amount of time required for testing scales in field situations.

Increasing-Load Test

~~Use certified mass standards to~~ conduct Conduct an "increasing-load test" with all test loads centered on the load-receiving element. Start the test with the device on zero and progress with increasing test loads to a "maximum test load" of at least 10 percent more than the gross weight of the packages to be tested. Use at least three different test loads of approximately equal value to test the device up to the "maximum test load~~.~~" **with an additional test load approximately equal to the average package tare weight.** Verify the accuracy of the device at each test load. ~~Include the package tare weight as one of the test points.~~

Decreasing-Load Test

~~For all types of scales, other than one~~ **Except for equal-arm balances or scales** with a beam indicator ~~or equal-arm balance~~, conduct a "decreasing-load test" with all test loads centered on the load-receiving element. Use the same test loads used in the "increasing-load test" of this section, and start at the "maximum test load." Remove the test loads in the reverse order of the increasing-load test until all test loads are removed. Verify the accuracy of the scale at each test load.

Shift Test

Use a test load equal to one-half of the "maximum test load" used for the "increasing-load test." ~~For bench scales (see Diagram 1) place.~~ Place the test load **as indicated in diagrams 1 or 2 below.** ~~in the center of four separate quadrants, equidistant between the center and edge of the load-receiving element and determine the accuracy in each quadrant for~~

~~equal-arm balances. For example, where the load-receiving element is a rectangular or circular shape, place the test load in the center of the area represented by the shaded boxes in the following diagrams.~~ **For each position of the test load, verify the accuracy of the scale.**

Comments: The tolerances for package checking scales have been in Handbook 133 for approximately 15 years. There appears to be a consensus among SWMA members that the scales used for regulatory inspection should be held to tight tolerances when checking packages. These tolerances have been acceptable for many years. Following the guidelines of Handbook 133 results in a high level of confidence in the inspection results. The SWMA does not want to see the level of confidence diminished by increasing the tolerances for package inspection scales. Consequently, the SWMA recommends maintaining the existing tolerances for package inspection scales as currently stated in Handbook 133. The Committee agreed with the analysis provided by the Southern Weights and Measures Association (SWMA) concerning this item and voted to withdraw the proposal.

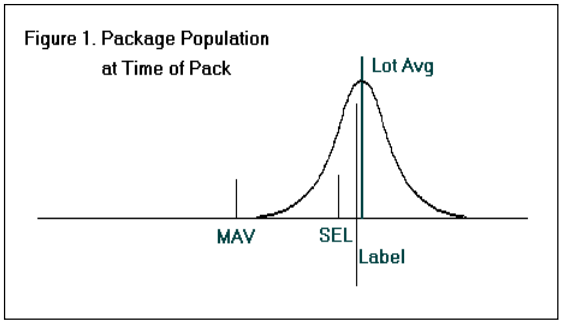
250-3 D Amend NIST Handbook 133, 4th Edition, Chapter 1, Section 1.2

Source: Northeastern Weights and Measures Association (NEWMA)

Recommendation: Amend the discussion section "**Why do we allow for moisture loss or gain?"** in section 1.2 Package Requirements on page 4 as follows:

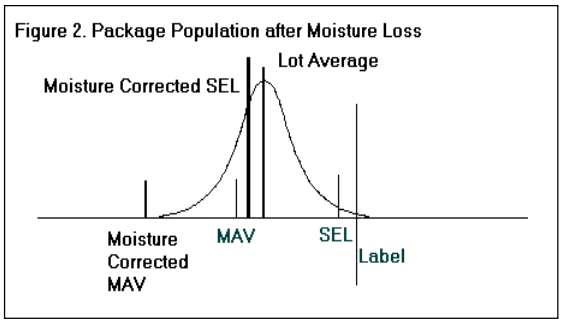
Why do we allow for moisture loss or gain?

Some packaged products may lose or gain moisture and, therefore, lose or gain weight or volume after packaging. The amount of lost moisture depends upon the nature of the product, the packaging material, the length of time it is in distribution, environmental conditions, and other factors. Moisture loss may occur even when manufacturers follow good distribution practices. Loss of weight "due to exposure" may include solvent evaporation, not just loss of water**. Note that allowances for loss or gain of moisture only apply to packages of commodities where the moisture has no value to the consumer (See Jones vs Rath).**



For loss or gain of moisture, **you** apply the moisture allowances to the maximum allowable variations permitted for individual packages and to the average net quantity of contents before determining the conformance of a lot. **You may apply the allowance before measuring the package errors or after. When applying the allowance before the measurements, you essentially correct each package back to theoretical weight at time of pack, see Figure 1 at right. When applying the allowance after measuring the package errors, you correct the MAV and SEL to recognize the moisture loss as in Figure 2 at right. You can find specific directions for applying the allowances in tests in Section 2.3.**

This handbook provides "moisture allowances" for some meat and poultry products, flour, and dry pet food (see "Moisture Allowances" in Chapter 2). These allowances are based on the premise that when the average net weight of a sample is found to be less than the labeled weight, but not by an amount that exceeds the allowable limit, either the lot is declared to be within the moisture allowance or more information must be collected before deciding lot compliance or non compliance.



Comments: Testimony was provided that indicated additional language would be developed and presented by the NEWMA to complete this proposal. As a result of that testimony the Committee designated this item as developmental.

250-4 D Amend NIST Handbook 133, 4th Edition, Chapter 2, Section 2.3

Source: Northeastern Weights and Measures Association (NEWMA)

Recommendation: NEWMA proposes deleting the current "M**oisture Allowances"** discussion in section 2.3 Basic Test Procedure, on pages 17 through 19 and replacing it as follows:

Moisture Allowances

What products have an established moisture allowance?

Flour and dry pet food have a moisture allowance of 3 percent of the labeled net weight. Note: Dry pet food means all extruded dog and cat foods and baked treat products packaged in kraft paper bags and/or cardboard boxes with a moisture content of 13 percent or less at the time of pack.

Meat and poultry products from a USDA-inspected plant are permitted no moisture allowance when tested under a Category A sampling plan with Used Dry Tare.

Meat and poultry products from a USDA-inspected plant are permitted the following moisture allowances when tested under a Category A sampling plan with Wet Tare. Note: When there is free flowing liquid or absorbent packaging materials in contact with the product, all free liquid is part of the wet tare.

- For packages of fresh poultry that bear a USDA seal of inspection, the moisture allowance is 3 percent of the labeled net weight. For net weight determinations only, fresh poultry is defined as poultry above 3 ºC (26 ºF). This is a product that yields or gives when pushed with the thumb.

- For packages of franks or hotdogs that bear an USDA seal of inspection, the moisture allowance is 2.5 percent of the labeled net weight.

- For packages of bacon, fresh sausage, and luncheon meats that bear a USDA seal of inspection, there is no moisture allowance if there is no free-flowing liquid or absorbent materials in contact with the product and the package is cleaned of clinging material. Luncheon meats are any cooked sausage product, loaves, jellied products, cured products, and any sliced sandwich style meat. This does not include whole hams, briskets, roasts, turkeys, or chickens requiring further preparation to be made into ready-to-eat sliced product. When there is no free-flowing liquid inside the package and there are no absorbent materials in contact with the product, Wet Tare and Dried Used Tare are equivalent.

These allowances are based on the premise that when the average net weight of a sample is found to be less than the labeled weight, but not by an amount that exceeds the allowable limit, either the lot is declared to be within the moisture allowance, or more information must be collected before deciding lot compliance or noncompliance.

How do you determine the allowance for products without an established moisture allowance?

For any product subject to moisture loss/gain, you may determine the appropriate moisture loss allowance based on a valid, scientific study. You may not use arbitrarily chosen allowances for moisture loss/gain. Many packers have conducted studies that they can provide in support of any claim that the product lost/gained moisture. Any such study should have included a variety of environments that simulate the potential distribution chains that could be encountered. You may use the moisture loss limits found in such study as an allowance in a compliance test.

What is the accepted method to determine the actual moisture loss for a lot?

Where the packer measures and records the moisture content of product in each lot, you may request a copy of that data to be compared to the moisture content of the product offered for sale. You must select a random sample of the product

offered for sale and have it tested for moisture content using a scientifically verified test procedure e.g. like those in the Official Methods of Analysis of the Association of Official Analytical Chemists (See Appendix D). The actual moisture loss is calculated as the moisture content (%) at time of pack minus moisture content (%) at time of sale. Use the difference obtained to calculate the actual moisture loss for the lot by multiplying it times the label quantity. Use this as the moisture allowance in the official test. In the case of moisture gain, this value will be a negative number.

Calculations

How do you apply a moisture allowance when conducting a test?

Moisture allowances may be applied either prior to testing or after testing. These two methods are mathematically equivalent means of adjusting both the individual package errors and the sample average. It is common practice to apply the moisture correction prior to the test for those products with established moisture allowances like flour and dry pet food. In most other cases the correction is made after the test since moisture loss data will probably be obtained as part of the follow-up investigation after the initial test has failed.

To compute the moisture loss allowance prior to testing, you correct the nominal gross weight in box 14 for moisture loss. Find the value of the allowance by multiplying the labeled quantity by the decimal percent value of the allowance. Enter this value in box 13a on the form. The nominal gross weight is found by adding the average tare (box 13) to the label quantity (box 1) and subtracting the moisture allowance (box 13a). Lot compliance is evaluated in the normal way using decision criteria in boxes 16 and 24 on the report form.

Example: Labeled quantity of a bag of flour is 2 lb and average tare is 0.04 lb (box 13)
Moisture Allowance is 3 percent (0.03) of 2 lb = 0.06 lb
Nominal Gross Wt. = 2 lb + 0.04 lb – 0.06 lb = 1.98 lb record this value in box 14.

To compute the moisture loss allowance after testing, you correct only the MAV and SEL for moisture loss. Perform your initial test with no moisture allowance in box 13a. When moisture loss data becomes available, find the value of the allowance by multiplying the labeled quantity by the decimal percent value of the moisture loss or allowance. Lot compliance is evaluated using decision criteria in boxes 16 and 24 on the report form and the moisture corrected MAV and SEL respectively.

Example: Labeled quantity of a package of rice is 2 lb, average tare is 0.04 lb (box 13), MAV (box 3) is 0.07 lb, and SEL (box 23) is 0.023 lb.
Moisture content at time of pack was 13.4 % (packer data)
Moisture content at time of sale is 10.6 % (lab data)
Moisture loss is (13.4 % to 10.6 %) = 2.8 %
Moisture allowance is 0.028 x 2 lb = 0.056 lb
Moisture Corrected MAV is 0.07 lb + 0.056 lb = 0.126 lb – Compare each package error measured in the initial test to this moisture corrected MAV using criteria in box 16.
Moisture Corrected SEL is 0.023 lb + 0.056 lb = 0.079 lb – Compare the sample average error in the initial test to this moisture corrected SEL using criteria in box 24.

Justification:

The products that have an established moisture allowance should be clearly stated. Currently the Handbook only poses the question “What is the moisture allowance for flour and dry pet food?” It does not state if any other products have a moisture allowance. In addition, the Handbook gives no guidance on what to do for products that do not have an established moisture allowance.

The “Calculations” section on page 18 is confusing and does not distinguish between applying a moisture allowance before or after testing. NEWMA believes that the current method of comparing the moisture allowance to the difference between the average error and the SEL is confusing. Simply adjusting the SEL with the moisture allowance is easier and more in line with how the MAV is corrected (see graphs on first page).

The current Handbook does not address commodities that are packed in sealed containers or how to treat commodities packed on the premises. NEWMA requests guidance from the L&R Committee on these two items.

Recommendation: The Committee believes that the Fourth Edition of NIST Handbook 133 provides adequate guidance for regulatory officials in the area of Moisture Allowance. The Committee designated the proposal as developmental.

260 Other Items

260-1 I Enhanced Product – USDA/FSIS Meat and Poultry Products

Source: Central Weights and Measures Association (CWMA)

Comments: Last year the Committee recommended and the NCWM adopted a proposal to form an Enhanced Product Working Group. This Working Group was not established as of the 2003 Interim Meeting. The WWMA recommended that the Enhanced Product Working Group propose a plan and scope of action for consideration by the NCWM. The WWMA and the SWMA encourage the Working Group to invite participants from USDA, industry, and other interested parties.

The CWMA formed a small committee to develop recommendations for the formation of the working group with the goal of providing those recommendations to the NCWM Chairman and the Committee Chairman in advance of the 2002 NCWM Interim Meeting. NIST Weights and Measures Division, provided copies of a previous NCWM study group protocol to assist in the development of this item.

The Committee voted to maintain this item as "Informational" pending the proposed formation of an Enhanced Product Working Group by the NCWM Board of Directors.

Dennis Johannes, California, Chairman

V. Dempsey, Montgomery County, Ohio
E. Price, Texas
J. Gomez, New Mexico
J. Cassidy, Cambridge, Massachusetts

Associate Membership Committee Representation: C. Guay, Proctor & Gamble Company

Petroleum Subcommittee: Randy Jennings, Tennessee, Chairman

Canadian Technical Advisor: B. Lemon, D. Hutchinson
NIST Technical Advisor: T. Coleman
NIST Technical Advisor on the Uniform Regulation for National Type Evaluation: T. Butcher, S. Cook

Laws and Regulations Committee